

Presentation topics: March 6, 8

Dark Energy

Dark Matter

Measuring Radiation

Harmful Effects of Radiation

Biological Uses of Radiation

The Advantages of Using

Nuclear Energy

The Disadvantages of Using

Nuclear Energy

Fission Reactor types

Nuclear Weapons

Fusion Reactors types

Particle Accelerators (Triumph at

UBC or CERN(LHC) or pick  
another one)

The Manhattan Project

Nuclear Fallout

Radioactive Wastes

Neutrinos

Chernobyl

Fukushima

Standard Model-quarks and leptons

Feynman Diagrams

Famous physicists and their discoveries:  
(Richard Feynman, Einstein,...)

Superconductors

Semiconductors and diodes

Black Holes(focus on relativity)

Negative Refraction

SuperNova Research (at Triumph?)

String Theory vs Quantum Gravity

Heisenburg Uncertainty Principle

Heisenburg's role in Second World War

Schrödinger Equation

Nobel Prizes in Physics

Irradiated foods

Physics in Movies

Physics in the News

(<http://physicsweb.org/>)

Higgs Boson

Other topics – run by Mr. Klaassen first

$$m_i H + m_i c(T_E - T_i) = m_w c(T_E - T_i)$$
$$0.03(3.3 \times 10^5) + 0.03(4180)(T_E - 0) = 0.1(4180)(T_E - 20)$$

$T_E = 20$

...

$$9906J + 125.4T_E = 418T_E + 7196$$

$$5434T_E = -704$$

\*

~~$T_E = -4.9^\circ C$~~  ~~Not Possible~~

$$T_E = -1.3^\circ C \rightarrow 0$$